

Figure 1

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FIGURE 1, Page 13 of 68

[illegible]



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[illegible]



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TCCAGGCCACCTTCTGAACAAAGCTGTCCAGCTGTACACAGGAGCCAGATTCTGTGGCCACCCAGCTCCCTATGCTGTGACGTCGCCCTCAGG  
TCCCCAAGCTGTGCCACCGCTGGGTCTCTGCCGCTCTGCCGGAAGTGTGCTGCCACACCTTCTGCCACCAAGCAACCCAGCTGCCCTGGCGGCCGGA  
GGCCACGGTGTGCTGCTGTGCAGAGTGTGCCACCCAGACTGCCACACTTCTGCCACCAAGCAACCCAGCTGCCCTGGCGGCCGGA  
TTGCCCAAATGCTCCAGCTGACGTGGAACCAAGTCCAAAGAGGAGCGGCTCAACAGGACAAAGCCCGGCTCCCGCAGAGCTGTGAGAGCTATGGAGGT  
CTGATGTCACTTCTGGAAAGAGAGTGTGACAGTGTGAAGGGCCCTTGGAGGGGCGAGGTGGAGGGCAGGGCAGCCGAAACACCCAGCAGGT  
CACCGTGGCGCTCCCGCAGAGAGGGCCACCGGCCCGGCTTACCACTTTGAACGTGTGCAACACTGGGGACAAAGATGTTGGAGTGCCAGCTGGAGA  
CGCACACCAAGATGTTGACCTTCAAGTTTCGACTTGAAGGGGAGCGACCCGATGAAATTTGCCACGTATATGTTGGAGCATGACTTTATCTGACGGCC  
GAGGGGAAACGTTTATCGAGCAGATGAAGGATGTATGGAACAGGAGAGGAATGTCTCAGCAGGACACAGACGCCGACCGTGGCTCCGACCCAGGGA  
CCAGCCGCCACACTCAGCACTGTGGGCTGGGACCCGGGAGGAGCCGACAAATCCCAAGCCAAAGCCCGCTGTATCAGCAGAACGTCCTGACACCC  
GGGAAGAGTGTTCATCATCTGTCCGGTGGCTGAGCACCCCGCCCGAGGCCCTGAATCTTGCCCGCCACTTCTCTAAGCTCCCTGCGGCCAGAAAGCC  
AGCCAAAGATTGAGCGCCCTATAAGAACAGCTGTCTCGAAGGAACAAACCCAGCTTCTAGCCAGTCTCAGCAGTCTCAGCGGGGCCCGCCAGCAACCC  
TCCTGGGGCACCCCCAGCCCTTTGGCCCCCTCTCTCCCTCTGTGACTGTCTGCCCAAGATGGAAGCACTCCAGCCACCAAGCAATGCCAGAGCCAGC  
GTCAGGAATGCCAGCCAGCGGGGTCCAGGGACACCTCAGGGGTGACCAAGGTGCCTCAACAGGAGCCCAAGTCCAGCCACTAGCGGAGACTCAAGAGGCCCGG  
CTTGTGTGAGCCCTCGTGGGCTAGCACCTTGCACTCCAGCTCCAGAGGTGCCTCAACAGGAGCCCAAGTCCCAAGGGAGCCCTGCCCCACCT  
CCTGCACTGAGCCCAAGCCCAAGCGGGAACCCCAAGCCCGCTTGGTCAAGCTGCTCCCTGCTTCCGCGCAGTGGGGCCCTCAGCTGGCCACC  
TCCAGCTCCCAAGCCCAAGCCCTGGGGCCCAAGCCACCCCTCGGCCCTGGAGTGGGAAAGGGCCCGCCCAAGGTGGGCTTTGTG  
GACAGCCATCAAGAGCTGGAACGAGCTGCGGACTCTGTCTACAGGAGCAGTGTCCCACTCTCAGCCCTCAGCTGGGACCCCTGTGGAGGTGGG  
CGACAGACTTCAACCTTGAGCCCTGAGAGGGACCGCCCGCTCAGAGGTCTGGGGGGGGAACCTGGCCCTGCCCCCAGTGCCTAAGGAGCGGTCT  
CAGGGCTGTCCAGCTGCCCAAGCCCTTGGTGGAAAGTCAAGAACTGGCCCCCACTCGAGGGGCGCTGATGGAGCAGGGCAGCTCTCGTCAATGACAGAG  
TCGTCTCCAGGAGTATGCTAGGCTATGACAGAGATGGAAGGCAAGTGGCTCAGACTCCCATGTGTCCCAAGCTGCCAGAGTGAATGTAACCTGCTTTGTG  
AGACCTGCACGTGTGGAGCCACAGACAGGGATGTTGGGTTCCCTCGGAAACGTCACAGCAGGATGTCAAGCTCACAGCCAAAGACTGTGGGGCGGCTTCT  
CTAGCCACCCCAAGACTCGGCGCTGAGTGGACCTTGGGCTCCCTCGGAAACGTCACAGCAGGATGTCAAGCTCACAGCCAAAGACTGTGGGGCGGCTTCT  
CGGTGGTCAAGCACTCAGGACGAGTGGACCTTGGCTCCCTCCCGCCACAGCTGAGATACTCTGCCCAACCCAGCTCTACCTGGACGAGGCCCTCCAGGCCCG  
ACGTGAAGCTGGCAGTGGCGGGGCGCAGCGGCTCTCCATCGAGTGGGCTGGCGGAGCCCGTGTCCAGGACTCTGGGAGCAGGGGCCCTCGGGCG  
AGACCCCGGTGCAGAAAGCAGGCTCCCTGCCCGTGAAGTGGCAGCGTGGCTGGCGACTTCGTGAAGAGGCCACCGCTTCTCTGCAGAGGCTTCTCGGGC

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ATGGCGGCGGCGGGGAAATCGGCTCTGTCGGGATTCGCGGGGCCAGGGCTACGAGCCCTGAGGCAGCGCGGCGGAGGAGCCCTCAAGCGCA  
GCAGCGCGCCGCGGCTCCGCGGACTGCTGGGAGGCGGGCAGCGGGGCCGAGCGGGCGGACTGGCGGCGGCGGCAAGTGCAGGAGTGC  
GTGTGGAGCTGGACCACTGCTGAGCAGCGCTCTTCCTTGCCGCTCACCGCGGCTCTGACTTCGCTGCGCGGAGCCCGGAGCGACGACGCGGGA  
GTGGGACCGGCTTCAGCCTGTGGCGGTGCCGCCGCCACGAGCGCGAGCCGCGGCGCCACCTTACCGAGTCGGTGGCGGCGCGGACACGCGGC  
GCCTCGAGTCCCGCAGCGGCCGAGCCCGGGAGAAAGCGGCGCCCGCGAGCCGCTCTCTCGACGCGGCCCGCGGCTGTGAGATGGAGAAATAAAG  
AAAACTCTCAAAGGGTTGCACAAAGATGGATGATCGTCAGAGGAACGAATGATCAGGGAGAAAATGAAAGCAACCTGTATGCCAGCCTGGAAGCAAGAAATG  
GTTGGAAAGGAGAAATAGCGAGGGCCTGTGTGTGATAAACCATACCAGTTAAAGGAGATGGATCTGAAATCAATCACTTAGCAGCTGAGTCTCCAGGA  
GAGGTCCAGGCAAGTGCGGCTTCCAGCTTCCAAAGGCCGACGCACTCTCTCTCTGCGCACTCCCATCAGGTGCGCACAGTGAATCAGAAATCTCCAGG  
AGTAAAGGAGAAAAAGATTTCCCAAGTGCCTTTTCAGAGTGGCAGAAATCACACCACCCCAGAGCCCCCTTACCAAGATGGCTTCTCACCATATAGCCCTGA  
GGAAACAAACCGCCGTGTTAAACAAAGTATGCGGGCCAGACTGTACTTACTGACGACAGATAGGGCCTAACTCTTCTCTGATTGGAGGAGACAGCCACAGCA  
ATAAAATACCGGTGTTTATTGGGCCTCAGAACTGCAGCTGTGCACGTGGAAACATTTCTGTAATTCTGTAATTTGTGATGCTCGGGGTGTTTCAACTAGAACCC  
TTTCAGACCAATGTTATGGAGAAAACTTTAAAGAAATTTGAGGTTGAGAGTTTGTTCAGAAATATCAAGTAGGGCTAGCTCAAGGATCAAAAGCTCCATC  
TCGTAAACCATCCAGAGTTTGTTCACGCGATGTCAAAATCTCTCATACATTGTCATCACTCTAGTACTCTTCTACATCTAGTTTCAGAAAAACAGCATAAAGGATGAA

GAGGAACAGATGTGTCCTATTTGCTTTGCGCATGCTTGATGAAGAAAGTCTTACAGTGTGTGAAGACGGGTGCAGGAACAAGCTGCGACCAACCACTGCAT  
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AAGTCTGTGGATTCCCTTCTCCCTCAGAGCTGCACAGCAGCAACCCGTACAGCAGCCTTTGGCTGGATCA CGAAGGAATCAAGAGAGCAATTTTAA  
CCTTACTCATATATGGAACCTCAGCAATCCCTCCTGCTTACAAAGATTAGCTGAGCCATGGATTCAAGTGTGGAAATGGAACTCGTTGGCTGCTTATTTCT  
AGAACTGGAATGTGAGAGAGATGGCCCTCAGGGCTCTTCCCATGATGTCAAGTGGGCCCTGCTGTGGCAATGGGAGAGCACTGGAAATTTCTGGGGG  
CAGCAGTGAAGCAGCCGAGTGGGGAGCCACAGTGGTCTTCCAGACCATGATCTCAGGAGATGTGGTGGAGGATGCTGCA GCGTCTGTGCAATGG  
TCTGTGCTGACCCCTGTCTACAAAGTGTACGTTGCTTTAAAAACATGTAGAGCCATGCTGGTATATATCTCCTTGCCACAGTTTAGCGGAAAGAAATCAAAAC  
TTTCAGAGACTTCTCCAGCCAGTTGTAGACACCATCTAGTCAAAATGTGCAGATGCCAATAGCCGCACAAGTCA GCTGTCCATATCAACACTGTGTGGAACCTGT  
GCAAAGGCCAAAGCAGGAGATGGCAGTTGGCAGAGAAATACTAAAGCTGGATCCATTGGTATTGGTGTGTGATTATGTCTTAAATTTGATTTCTTGGAA  
ACCAAACTGAATCAAAACAAATTGGCAAGAACTTCTTGCCCGCTTTGTCTTATAGATAGACTGTGTGGAAATTTCTGCTGTAATTTTATCTCTCATATTTGTCAG  
TACTGATGTTTTCACAAAGCTGAGCCTGTGTGAAATCAGGTATAGAAAGCTGTGCTCCCTCTTAACTTTGCTTTGCA GTCCATTAAATTTCCCACTCAATGGTT  
GGCAAACTTTCCAGAAAGGATCTACTGAGTTCTGCAAGAAATGGTACTACAGTACCCCATGTTGTTTCAAAACTGTTAGAAATGCTGAGTGTTCAGTTCCA  
CTCACTTCAACAGGATGCTGCGCGTTTGTATGGCTATTGCAGATGAGGTGGAATTTGCCGAAGCCATCCAGTTGGCGTGAAGACACTTTTGGATGGTCAAC  
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GAGCAACCAAGGCCAATGTTTCAAAACAAAGGCAGACCCACAGTCAGTGTGTGAACTCCCTCTTATCTCATTCATTCCTGAGTGAATTAATGTTTCCAGCCTTGT  
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TGCAGATTAGTCAATACAGAGCTCAATCCAGTATTTGAGGACCTTCTTGAAGCATCTATGCTTCAAGTGA TACAAAGTAACTTTTAAAGTTCAGAAAGTT  
GCTGCTGCTCTCTGAAAGGGCTGAAATAGTATGATACCTACAAAGATGTGTAATCAATACAAAGTGCAAAAGAGAAATGGAAAGCTGAAGAAAG  
AAGCTTAGCAATTGCCATGGCAATGTCAGCGTCTCAGGATGCCCTCCCATAGTTCTCAGCTGCAGTTGAAAATGGAGAAATATCATCATATTATTC AAC  
AGGATACACCAGACTTACCAGGACATACCAAGCAACAAACCCGTATAGAGAGACACTGAATGGCTGAAAACAGATAGGCTTGGAGCAATT  
TTCTTCTGTTATCAGGCTCAAGATGTGGAACTTGAATGGCTGTAAACAGGTGACTTATGTCAAGAACACATCTTCTGAGCAAGAAAGAAAGTAGT  
AGAAGCACTAAGAGAAAGATAGAAATGATGAGCCATCTGAATCATCCAAACATCATATTAGGATGTTGGGAGCCACGCTGTGAGAAAGCAATTA CAATCTCT  
TCATTGAAATGGATGGCAGGGGATCGGTGGCTCATTTGTGAGTAAATATGGAGCCCTCAAGAAATCAGTAGTTATTAAC TACACTGAAACAGTTACTCCGTG  
GCCTTTCGTATCCCATGAAACCAATTCATTACAGAGATGTCAAAAGGTGCCAATTTGCTAATTGACAGCACTGGTCAGAGACTAAGAAATTCAGAGATTTTG  
GAGCTGCAGCCAGGTGGCATCAAAAGGAACTGGTGCAGGAGAGTTTCAGGGCAAAATTA CTGGGGCAAAATTTGCAATTTATGGCACCTGAGGTACTAAGAGGT  
CAACAGTATGGAAGGAGCTGTGATGTAGGAGTTGGCTGTGCTATTATAGAAATGGCTGTGCAAAACCAACCATGGAATGCAGAAAACA CTCCAATCA  
TCTTGTCTTGTATATTAAAGATTGCTAGTCAACTCTGCTCCATCGATCCCTTCACTTTGCTCTGTTACGAGATGTGGCTCTTCGTTGTTTAGAACTTC  
AACCTCAGGACAGACCTCCATCAAGAGACTACTGAAGCATCCAGTCTTCTGATCACTAGGTAGCCAAATTCAGAGATCAACTACAGTAAACAGGATG  
CTCAACAAGAGAAAAAACTTGTGGGAAACCATTTGATATTTCTACTGGCCATGCCACTGAACAGCTATGAACGAGCCAGTGGGAAACCCCTTACCT  
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GGTGAACAGGAAAAACAATGAAGTTTGATGACTAAATTGCAGAAAGCATAATTTTATTTTGGAGCACCTTTTCAGCAATATTAGCGGCTGAGGGGCTCAG  
GATCTATTTTAAATTTCAATTTCTCCATTTCATATAGTGA TCACAAGCAGGGGGTCTGCAATTCGGTTCAAAATTTTGTCTCACTGGCTATAAAATCAGT  
ATCTGCCCTTTTAAAGTCAGAGTATGCTATGAGTAGCAATACATATATTTTAAAGTTGATCTCTTTATGACCCACAGTTGACCTTATTTTCTTAA  
ATACAGGGCAGTGTGGCTCATTTGTCATTTTACTGTTGGCCATTCATTTGCTTTTGGAAATTAATGGTTTGTATTTTCAATGTTTATTTTCACTTCTTTG  
TTTATTCAGGGAAAGCTGATCTTTTTCAAAACCAAGAAAAAAATGAAC TAGATGAGTTCAATTAATACTCTGCTATTTGTTCAGAGTTTAA

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ATATAGACTTAATTTTGTGTTTTTAAATTGGAATACAAATAAAGTACTACCTACATTTTGTGAGTCAGTCACCACTCTTATTGTGCAAGTTAAGTACAAAGTTAACTA  
AAAATAAACTGTCTCTCTGTTGCAACTCACAACCAAGATCAAGATTACCTTAAATTTTGTGAAATTTTGTAGATGTTTGTGTTGTCAAACTGTAGGAAACT  
TCACAACATTTAAGTCTTACTGTATGTAAACAATCCATCACTTCACTACTGTTAATAACA TAGAGCTGCCATTTTCCCTTTTACCATGCAATCATCTCTT  
TACAGTAGGCTGGCAGATCATTTTAAAGATTATTCAACTACCAATCAAGTAAATGTTTAAACAGTACATTTGCTTTGAACTTGGAATAATGTGTTTTCAGA  
AAGAAAAATGGAATTGAATTTTCAATTTATACACTAAATTCCTTGGATTGTCACAGTTACCTAACGTTTGTAGCTGGAGTTAAATTCAGATGCATGGAATCCCTG  
AAGGAAAAATGGTAGCTTTTAACTTTTGTGTGTGAGTCTTTTAAATCAAGTACTGATTAACATTAAGTACAACTTTGAGATTTTGTAGTTTAACTCTT  
CAGAAAGCCAGTGTGAATAGAAATGGTTATTTCTCAAAGACTCAGGATAAACTAAATAAGCTATATATAGAGTACATTTAAATGTACAAACACAAATTTGGAA  
GTAAATAAGTTACAAGATAAGTTTACAGGATATATGTCTTACAAATTTTAAAGGCGAGTTTGTGTTTATGTGAAATATGTTCTTAGTGAAATTTTACATTC  
CTTGTGTTTGGAGATTGGCGATATTTGAAGAGTTAAATAATAGTACAGAAATGTGAAGTTTGGTATCTCTAAATGTGTTGTTACTGACTTCTTTTATTTTT  
TTTTATTTTTTGTGACTACTTAGAAATTTTACAAATTTCTAAATAAGATTGTTTCCAAAGTCTCTCATGTGCAAGCTTTAAAGGATGCACCTTGCCATTTTATGTACT  
GGAAGATCAATTTGGTCAGATGAATACTGTGTCGACAAAAATGTAAACTGTATAAACTGAGGAACCTCAGCTAAATCAGTATTAATTTGTAGATCACCATGCC  
ACCAATTTCAAACCTCAAACTACTGTAGATTTTCAAAATCCATTTGTGTTGTGAGTTTGTGAGTTTGCAGTTCCCTCAGCTGCTGTTAAATTTGTGTTTGT  
TTTGTGTTTCAATGCAAAATGTGATGTAATATTTCTTATTTTCTTGGATCAAAAGCTGGACTGGAATGTATCGTGTAAATTAATTTTGTGTTCTTAATGTATTTGG  
TACTCAAAGTTGTAAATAACGTCCTACTACTGTATTTTCCAGTTTCTACTACCTCAGGTGTCCTATAGATTTTCTTCTACCAAAGTTCACCTTTCCACAATGAATTT  
ATATTTGCTGTGTGACTATGATTTCCCTAAGATTTCCAGGGCTTAAAGGCTAACTTCTATTAGCACCTTACTGTGTAAAGCAAAATGTTACAAAAAANAANA  
AAAAATCTCTGGGTTAAGAAAAATTTGGCTTAAATGTATCTCTTGTATTTTAAATATATTTGAGATATTTTAATTAATAATTTTACCCCATTTGAACCCGATTTTA  
TAGTATTTGTACCTATTTTGTGTTTGTCTTTATAGTAAATAAAAGTTTGTGAAACAAAAAANAAGTCGAGCGG

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ATGCCAGATAGCAAAAGAAAGCAATCAACTCACCGGACTCAGAAACCTAAAGCAATCAATTCCTTGCACTCTGTAAATAATCCAGGAACACAGAAATCATG  
TGTTCTCTCTCTGTTTCAACCGACAGAGCCAAAGACTAAATTAACCTAGATCTTAAAGTATAGTATATGTTTCAAGAAATCAATTCAACTGCTAATGGAACCTGG  
AATCTATGAAATGTTTGGGACCCCTGTTTATGTCTATGTGCGAGAGACTGAAAGGATGAAACACGTTATACCGTGAGATATGTTGGGCTCCATCAGGCGAG  
ACGTATCAACCAATAAATGTGCTATTTACACAGTGTGAGGAAAGGCAATATCAGAAACAAGACTTCTCAGAAAAAACAACATATGAAATGCCCAAAAGACTT  
CATTTGGCATTAACAAGAGCACAAAGTCTTAATTTCTAAAGAAAGAGTTCCAAAGGCTGTACATAGCAACCTACATGACATTTGAAATGTTGATGGTATTT  
CAGAACCCAGACTGGCAGATAAAGTCTTCAGGAAATGAGTTTCTATCTTCCAAAGATGAAATTCATCCCATGAACTTGGCTCAGACACCTGAGCAGTCCCATGA  
AACAGAAATGAATTCCTCTCTGTCAGATTTATCCATTTGTGAAGAGTTTCTATGGAAAGAGTCTACTGGTGTATAGAGACATTTCTAACAATCAAAATCTCAC  
CACAAAGCCTCAGAGATCTGCAAGAACTTGAAGAGCTACATCACCAGATCCCATTTATCCCTTCAGAAAGACAGCTGGGCAAGTCCCAAGTGAAGAAATTTCTA  
ACAAATGTATGACAGCAAGAAAGCAGAAATACAGCATCTCTTAGTAAAGTAAATGCCAGCCGAAATTTTAACTAATGATCTAGAGTTTGTATAGTTTCAGATC  
ACTTAAACACTTACAAATTTCTCTTTCCAAAGCAAAACAAGAAAGTGCACTCTTCCAGACATATCAATATTTGGGTACATTTATTTGGATCATGATAGTTTACG  
AAATAAGTCAATCACATATCAAAATGTTTGGAAAAACCTTAAGTGGCACAAATTCAAATTTCCCAAGAAATTTATGGACTCTGTAAATAATGAAGAAATTGACAG  
ATGAACTATTAGTTGTCTAGCTGCAGAAATTTATGCTCTGTATGAGAAAGATAACAACTCTTGCCAAAAAATGGAATGAAACAGATCCTGAAAAACCTTA  
AATCTGTCTCAGATGGAGAGGAAAGTACCCCAAAAGAAATGGGCAGAGAGACAAACAAAGTCAAAATACAGAGGCAATAGTGTGGCTCAGGATATATG  
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GGAAAGGGAGCCTACGGCACAGTATCTGTGGTCTCACTAGTCAAGGACAGCTAAATAGCTGTAAACAGGTTGGCTTTGGATACCTCTAATAAATTTAGCTGC  
TGAAAGGAATACCGGAAACTACAGGAAGAGTAGATTGTCTAAAGCACTGAAACATGTCAACATTTGTGGCCTATTTGGGACATTTGGGACATGCTTGCAAGAGAACA  
CTGTGAGCAATTTTCAATGGAGTTTGTCTGTTGCTCAATCTCTAGTATTAATAACCGTTTGGGCCATTTGCCGTAGATGGTGTCTGTAAATATACGAAACA  
AATACTTCAAGGTGTGCTTATCTCCATGAGAACTGTGTGGTACATCGGATATCAAAAGAAATTAATGTTATGCTCATGCCAATGGAATAATAAAGCTGAT  
TGACTTTGGCTGTGCCAGGCGTTTGGCCTGGCAGGTTTAAATGGCACCCACAGTGACATGCTTAAAGTCCATGTCATGGGACTCCATATTTGGATGGCCOCAGA  
AGTCAATCAATGAGTCTGGCTATGGACGGAAATCAGATATCTGGAGCAATTTGTTGATGAGATGGCTACAGGGAAGCCTCCACTGGCTTCCATGGA

FIGURE 1, Page 44 of 68



CAGGATGGCCGCCATGTTTTACATCGGAGCA CACCGAGGGCTGATGCCTCCTTTA CCAGACCATTCTCAGAA AATGCAAGCAGACTTTGTGCGCATGTGCGCT  
GACCAGGGACCAAGCATGAGCGACCTTCTGCTCTCCAGTCTCTGAGCAAGCACTCCTCTTGGAGAGAACTCACTGAATATACATCAAGCACTTTCTTCCCAAGTTCC  
ACTGCAGATGCTCCCTTCTTAATTTGTGGGAATGATGGCTAAGGGATCTTTGTTTCCCACTGAAATTCAGTCTAACCCAGTTTAAAGCAGATCCTATGGAG  
TCATTAACGTAAAGTTGCAGTTACATATTAGCCTCCTCAAGTGTGAGACATTTATCTCATAGTATCAGAAACATGTTCTTAATAACAACAATACTATTT  
CAGTGTTCACAGTTTGTGTCAGGAACATACTCTCTATTGTTTATATGACATTTCTTTTATTTTGGCCTGCTCTGTCAAATTTTAAATGTTGTAGTTTA  
AAATAAATTGTAAACCCCCCTT

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ATGTTTGGAAAGAAAGAACGCGGTGGAGATCTCAGCCCCATCCAACTTCGAGCACCGTGTACACAGGGCTTTGATCAGCATGAGCAGAAATTTACAGG  
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AAACCATCTGTTCCGGGCA GCAAAGGTGCCAAGGATGGGCTCTCACTGCTGTGACGAA TTTGAGAA CATGTGCGTGACGGCTCCAACTCCCTACGCA  
GAGAGATCCACCA CCACTGCCCTGCCCA CCAAGGAAATGGAATGCTGGAGGACGGGCGGCGGCA GAGAAAGGCCCAAATCTTCGAGGGATGGTCCAGG  
AGCCGGGCCACAGGCCACAGTGGGCAAGTGGCAGTGCTGACAGACGGGTGGGCGGCA GAGAAAGGCCCAAATCTTCGAGGGATGGTCCAGG  
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TGGCCCCCCCAGCAGTGCCCTTGTGCCCCCTGTCTCTGCCCCCTGGGCCCTCGTCACCA CAGCGGAGCCCCAAACGAGTGTCCCATG  
AGCAGTTCGGGCTGCCCTGCAGCTGGTGTGGACCCAGGGGACCCCTCGTTCTATCTAGACA ACTTCATCAAGATTGGTGAAGGCTCTACAGGTATTGTGT  
GCATTGCCACTGACGCAGCTCAGGCAAACTGTGGCCGTC AAGAAAGATGGACTTTGCGCAAGCAGCAAAAGACGTGAAC TGTCTTCAATGAGGTGGTGATC  
ATCGGGACTACCGGCACAGAGACGTGTGAGATGACAA CAGCTACCTGGTGGTGAAGAACTCTGGTCTGTCATGGAGTTCCTGGAAGGCGGCGCCCT  
CACGGATATTGTACCCACACCAAGATGAACGAGAA CAGATCGCCGCGTGTGCTGCTTCAAGGCTGTGCTGCTCCACGCCCCAGGGTGTCTAT  
CCACCGTGACATCAAGAGTGA CTCTATTGCTGACCCATGATGGCCGGGTGAAGCTGTCCGACTTCGGGTTTTGTGCCCAAGGTGAGCAAGGAGTGCCTCG  
GAGGAAGTCTGTTGGCACCCCGTATTGGATGGCCCGGAGCTCATCTCCGCTTCCCTATGCGGCCAGAGGTGGATATCTGGTCACTGGGGTGTATGGT  
GATCGAGATGGTGGATGGGAGCCCCCTTACTTCAAAGGCCA CCCCCTCAAAGCTATGAAGATGATCCGGGACAA CCTCCGCCCCGACTGAAGAAACCTGC  
ACAAAGCGTCA CCGTCTCTGAAAGGCTTCTTGGATCGCCTGCTAGTGGGGGACCCGGCCCCAGCGGGGCCACTGCTGCCGAGCTGCTGAAGCA CCCCCTCTCTCA  
CCAAAGCGGGGCCACCAAGCCAGCATCGTGCCCCCTGATGCGGCCAGCA CCGGAACCA GATag

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GGATTTTGTCACTTCTGTGTGA ACTAAAGTGA TTCAAATGCTCTTTTGGATTGCTTCTGCACTTCAAGAACACAAAGATGAATCACTCAGACCTGAAACAA  
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CACTACGAGCTCCAACTAGAAACAGGAAGGATTTGACAACTTGACTTCTGTCCATCTGCCAGTGGCACTCTCCACGGGAACACTGGTAACATAATAAAAT  
ACAAATCTGGAATACTGCAATGAAGAACGCTGAAAGCTTTACAGAAAGCCGTGATTTCTATCCCACTTTTCCGGCATCCCAATATTAACAATTACTGGACA  
GTTTTCACTGTGGCAGCTGGCTTTGGTTATTTCTCCATTTATGGCCTATGGTTTCAGCAAGTCAACTCTTGAGGACCTGTTTCTCTGAAGGAATGAGTGAAA  
CTTTAATAAGAAACATTA TCTTTGAGCTGTGAGAGGGTTGA ACTATCTGTACCAAAATGGCTGATTTACAGAGGATTAAGGCCAGCCATATCTCTCATTT  
CTGGTATGGCCTAGTACCCTCTCTGGCCTGCTCCCATGTGCATAGTTGGTTAAGCATGGACAGGCA TAGGGCTGTGTATGATTTCCACAGCTTCAGCAC  
ATCAGTGCAGCCGTGGCTGATGCCAGAACTACTGAGACAGGATTTACATGGGTATAATGTGAAGTCAGATTTACAGTGTGGGATTA CAGCATGTGAATT  
AGCCA GTGGCAGGTGCCTTTCCAGGACATGCATAGAACTCAGATGCTGTACAGAAACTGAAAGGTCTCTTATAGCCCAATTGGATA TCAGTATTTTCC

FIGURE 1, Page 45 of 68

TCAATCAGAAATCCAGAAATGAAAAATCCCGGTACAGTGTAGACTCTGGAATGGAGAAAGTGTGCTGTCTCCAGTGGAACTCACACAGTAAATAGTGACC  
GATTACACACACCATCTCTCAAAAACTTTCTCTCCCTGCTTTTACGTTGGTACAGCTCTGTTGCAACAAGATCTCTGAGAAAAAGGCCATCAGCAAGCAGTTT  
ATTGTCCCATGTTTCTTCAACACAGATGAAAGAAAGCAAGGATTCAAATCTTTCACGGTTGCCCTGCTTATAACAAGCCAACAATACCATGCTCCCTCCA  
GTGTTAACCCTGGACTGAGCCAGAAATGTGATTTCTCTGATGAAAAAGACTCATACITGGAAATCTAGGGCTGCCAAATCAATTCATGTCTCTATATCTTGACAC  
TTTCTCTGTGCTTTTCTGTAATTTCTAGGTACAAATACGAGAAATATCTTGAAAAATACAGTGGTGGCACTGGAGAAATCTATATTTAAAAACCACTCT  
GTTCAAAAGGGGACCAAGTTGTAGTCCCTCTGTTTGGACAGAGTACTATGACAAGGAAATACAGAAATACCAATCTAGCTAGTGTCAITTTATCTGGAAT  
TTTTCTAAGCTGTGACTAACTCTTTTATCTCTCAATATAATTTTGGCCAGTTAATTTTTCAGTATTTTGTGTTCTTGGAAATGAGCCCTCAGAGGAC  
AGTCTTCCAAAGTACATCTTCTCTCCAGATTCTCTGGCTTTTAAATGAGCTATTGTTAAACCAACAGGCTAGTTTATCTTACATCAGACCCCTTTCTTGTA  
GAGGAAAAATGTTGTGCTTTCTCTTTCTGTTAATACTTATGTTAAACACCTAAGCTGAGCTCACTCAATTAATGATTCACCTTGAAATATATACAGA  
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ATATACTGAATTGA

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CTCTTGGA\_TCCGGCTGACGCTCAGCCTCCCTGGGCTCCGGCAGGGGGGGCTGCTCGCTCAGCCCCAGCGCCCTCGGCTACCCCTCGGACCAAGC  
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GGCCAGGCTAGAGGCGCCGCCACCGGCCCGCGGAGCCCGGATGCTGGCCCGGAGGAAAGCTGGAGGAGCTGGAACCTTGAAGCAGCAGCAAGAACGGC  
GAGGGCCCTCCCAAACAGCGAGGGGCTCCGAGGCAACCTGTGTGACCTGCAGAAAGCTGAGGAGCTGGAACCGGGCAACGGGGGTGGTGTCTAC  
TGGAAGCTTTCTCACCCCAAGAAAGCAAGTGGCGTCAATGAAAGCTGAAAGCAAGCTGAGATCAAGCCGCAATCCGGAAACAGATCATCCGGAGCACCAAG  
CAAAATCCAGCACAGACCTCGGGCTCATATGCCCAGGAAGCTGATCCACTTGAATCAAGCCGCAATCCGGAAACAGATCATCCGGAGCACCAAG  
TCCTGACGAGTCAACTCACCTGATACATGTTGGCTTCTACGCGGCTTCTACTGTGACAGGAGATCAGCATCTGCTGAGCAATGGATGGCGGTCCC  
TGGAACAGGGGTGAAAGAGGCCAAAGAGGATTCGCGAGGAAAGTCAAGCATTCGGGGTTCGCGGTACCTCCGAGAGAAAGCA  
CCAGATCATGCACCCAAATGTGAAGCCCTCCAACTCATCTGCTGAACTCAGAGGGAGATCAAGCTGTGATCTGCGGGTGGCGCCAGCTCATCGACT  
CCATGGCCAACTCTTCGTGGGACCGGCTCCTACATGGCTCCGAGCGGTTCAGGGCAACATTAATCTCGGTGCACTCGGTGATCTGGAACATGGACCTGT  
CCCTGGTGGAGCTGGCCATCGAAAGGTACCCCATCCCCCGCCGACGCCAAAGAGCTGGAGGCCATCTTTGGCCAGCCCTGGTGCAGAGGAAAGAGGA  
GAGCTCACAGCATCTCTTTGGCCAGGTCGCCCGGGGCCCCAACACAGCGGTTACGGGATGGACAGCTGCCGCCATGGCCATCTTCGAACTGTGGAC  
TATATGTGAAGAGCGCCCTCTAAAGCTGCCAACCGTGTGTTCACCCCCGACTTCCAGGATTCGCAATAAATGCCTCATCAAAACCCCAACGGAGCGG  
GCGGACCTAAAGATGCTCAAAACCAACGCTTCATCAAGCGGTCCGAGGTGAAAGCGGATTTTGCCTGCTAGTTGTGTAACCCCTGGGGCTGAAACCA  
GCCCGGCACACCCACGCGCACCGCCGTGTAACAGTGGCCAGGCTCCCGGTGACCTGCCACCCCTGCTGCCACGCCCGCCCTTCCAGCT  
GAGGACAGGCTGGCGCTCCACCCACCTCTGCTCACCCTGCGGAGAGCACCGTGGCGGGGCGCAACCTGCGCACGCAAGAACCGGGGGTCTCTCTCC  
TGCTGGTCCCTGCGGGGCTGCCTCTAGGGAACGGGCGACGCTGCTGTGTGCTCTCAGAGCCCTCTGCTTCCCTTAGGTTACAAAACAAACAGGGAGAGAAA  
AACC

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CGGGGACTCGGAGGTACTGGGCGCGCGGCTCCGGCTCGGACGCCCTCGGACGCCCTCGGGGTCCGGCTCGGGTGTGCTGCTGCGGGCGCCCGGC  
TCCGGTGGCTCCGCTCTGTGCCCGCGCGGAGCGCAGTCTGCGCGCCCGCTGCGCCCTCAGCTCCTTTCTGAGCCCCCGCGCATGGGAGCTGCGC  
GGGATCCCGGGCCAGACCCCGCGGTGCTCTGCTCAAGCTCTGCTGCTGCCGTGCTGGCGGTACCCAGACAGCCATGTCTTCAATCAAGCAGCCGT  
CCTCCAGGATGCACTGACGGGCGCGGGCGCTGCTTCGCTGTGAGGTGAGGCTCCGGGCCCGGTACATGTGTACTGGTGTCTCGATGGGGCCCTGTCC  
AGGACACGGAGCGGGGTTCGCCACGGGCGACAGCCTGAGCTTTCAGCTGTGGACCGGCTGCAGGACTCTGCAACCTTCCAGTGTGTGGCTCGGGATGAT  
GTCACTGGAGAAAGACCGCGCAGTGCCCAACGCCCTCTTCAACATCAAAATGGAATGAGGCGAGGTCTGTGTCTGCTGAAGCATCCAGCCTCGGAAGCTGAGAT

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GAGATCTGGAGATAGCGGGCTTTTCATTTTTCCTGCTCCAGATTCCCGGCGCAGGATCCCGGCTGGGGTTCGGGAGGGTGGCGCGGC  
CGGGCTGCGACTGCGGCCCTCCGCTGCGGGGCTCGGGGCTGCGGACTCAGCGGAGTCGGCTGAGTCAGTTCTTCCCGCGGACTCCCGCGCGCGCGCC  
GCTGCGGTGGAACTCTGTCCAGAGGCGGGCTCCGCGGGGTCCGGTCTAGCGGTGCGTGGGGGCCACGGTCACGGTCA TCCAGGCCAGGCCCGGCTCC  
AAGACGCCCAACGGCCCGCCAGAGTTCTGCGCGGCCGCTGCGCTCGCGGAGCCCTGCGCAGGCCCTGAGCTCGTTTGGGGCTGAGTGGGGAGGA  
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GGGAGCGCTGCTGCGGGGCTGAGCTGAGCTGCGCCCGGGGAGCTGTGGCGCGGCCCTGCCGTTCCTGAGCAGCGGACTGTTCA TGTCTGGGAGGG  
CGGGGGTTGGGAAGCAGGTGCCACCATGGCTAGTGGCAGCTGTACGGGTGCGAAGAGGACGAGAACTCTGAAGAA GTTGTAGTCAAGCTGAACAA T  
GTCCAGGAAGGAAAAACAGATAGAAAACGCTGTGTCAAA TCTGGAGGATCTGCTGTGTTCA CGTACTCCGAGCACGCCCTCCAA GTTATTTCAAAGGCAAAAA  
TATCCATGTGCCTCTGTGATCGTCTTGGACTCCTATATGAGAGTCCGAGTGTGCAGCAGGTGGGTGGTCACTTCTGTGCAAA TTTAATAGAA GTCTGTCCCA  
GGTACAATGCAAAAGCTTAATGGGACCCCGAGATGTTGGAAATGATTGGGAAAGTCCCTTGGTGTTCACCAA TTTGATCTTAAATGCTAACAGTTCA TAAATGCC  
AGGTGAACCTTGTCAGTGA TTGGACTGAAGACCTTAGATCTCCTCTAACTTCAGGTAAATCA CCTTGCTGATATTGGATGAAGAAAGTGA TATTTTCATGT  
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TGCAAGAGGCCGATGCTGGCACTAAATACTCCTTATGTACCAACACAGTTTACATGAGAAAGATTGGAGATGAAGATGGCCA TTTCCCAAGCTCATAGG  
GAAAGTATGCTCTCCATGCTGATGCATTCTTCATCAAGGAAGTTTCCAGGCCATCTGCGAATGCATTTGTCAA CTCTCTTGAACAAAAATGTTAATTTTCAGAA  
AAA TACTGTTATCAAAAGGAATACACCTGAA TGTTTTGGAGTTAATGCAGAA GCATATACATCTCTGAA GTGGCTGAAAGTGGCTGTAAAAATGTCTAAATC  
ATCTTTTGAAGGAACCACTTCCCTGGATAAATGGCAGCAGTGTGCCCAAAATAC TAAACAGTTATGAAACGTCA TGAGACATCA TTAACCA GTGCAAGC  
TGGAGGCGCTTCGAGCTATTTTACATTTTATAGTCCCTGGCATGCCAAGAAATCCAGGGAGGATACAGAA TTTTCATCA TAAAGCTAAATATGTGTTAAAAAAC  
AGTGTITTCAGAAATGATATTCACAAACTGGTCTCAGCACTTTGAAACAGGTTCA TTGGAAATCCCTGGGATTCAGAAATGTGGA TTAAGTAATTTCTTCTA  
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GGATCTTCTTAAATTTGTCAAGGTATGTGAGAAAGAGAGCAGTCCCAAAATTTGGTGAAACTTCTACTGAATAGTGGTCACTCGTGAAACAAGATGTACGAAAAGCG  
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GGAATAAAAATATCAGGGATATGCTCCCTTGGACTGAAGGAACGAAATTTTAAACCTTAGTAAGAACCAATTTCACTCCCTATCAGAGCACTTTCTT  
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TTCTCAAAATAAAGCTGAAAGAGATTCTCTGAGATTGGCTGTCTTGAAATACTGACATCTCTGGATGTCACTTCAACTTGGAACTTAAAGCAAGACATCATCAAGG  
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CAGTTTACCGAGCCTATGAAGGAGAGAAAGTGGCTGTGAAGATTTTAAATAACATACATCACTCAGGCTTTAAGACAAAGAGCTTGTGTGCTTTGCC

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ACCTCCACCACCCCGTTTGATACTCTTGTGGCAGCTGGGATTCTGTCCTCCCGGATGTTGGTGATGGAGTTAGCCTCCAAAGGGTTCCTTGGATCGCCCTGCTTCA  
GCAGGACAAAGCCAGCCTCACTAGAAACCTACAGCACAGGATTGCACTCCACGTAGCTGATGTTGAGATACCTCCACTCAGCCATGATTATATACCCGAG  
ACCTGAAACCCCAACAATGTCTGCTTTTCACTGATCCCAATGCTGCCATCAATTGCAAGATTGCTGACTACGGCATGCTCAGTACTGCTGTAGAAATGGG  
GATAAAAACATCAGAGGGCACACCCAGGGTTTCGTGCACCTGAAGTGGCAGAGGAAATGTCATTTATAACCAACAGGCTGATGTTTATTCATTTGGTTTACT  
ACTCTATGACATTTTGACAACTGGAGGTAGAAATAGTAGAGGGTTTGAAAGTTTCCAAATGAGTTTGTAGTAAATAGAAATACAAAGGAAATACCTGATCCAGT  
TAAAGAAATAGTTGTGCCCCATGGCCATAGTTGAGAAATTAATAACAGTGTGAAAGAAATCCCTCAAGAAAGGCCTACTTCTGCCCAAGTCTTTGA  
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TGCAAGCATTTGGCTGGCTGTGGCACACCGACAGAGGACAGCTCTCAATTTCTTGACITTAATACTGAAGGATACACTTCTGAGGAAGTTGCTGATAGTAG  
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CTCATACTAGGAAAGACACAGAAACTCTCTTTGTGCACAGAACTCTCTGTGCTTTCTAGACATAATAGAGTTGTTTTCAACTCTATGTTTGAATGTGGA  
TACCTGAAATTTGTATAATTAGTGTAATACAGTGTTCAGTCCCTCAAGTGATATTTTATTTTATATATACACTAGCTACTTGTGTTTCTAATCTGCTTC  
ATTCTAATGCTTATATCACTTTTCCCTAAATTTGTGATGCTGCAGATCCTACATCATTCAGATAGAAACCTTTTTCAGATAAATATAGAAATTAGAAATTCACAG  
CTCTACCAAGACCATGAGGATAAATATCTAACACTTTTCAGTTGCTGAAGGAGGAGCTTAGTTATGATGGATAAATAATCTGCTTTAGGAAAGTACT  
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ATGTGAAACITTTAAATTTATATTAAGGGTAAATCAAAATTTCTGTAATTTAAAGGAAGCTATGCTTAACTGTTAATGTTAAT  
TAAACAAAAAATCATATATAATAGAGCTCTTTGTCCAGTGTAATCTCTTCAATTTGTAATTTGCAATTTTTCACAAAGACAAATTAACAAAAATG  
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CAGGGCCTGGGCACGACCAATGTTGGGACGTGCCCCGGGCTTCGGGGACCGCTGCGGCAGCAGAGCGGCTGGCCAGGAACGGGGCCGAGGCTGGACCC  
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CGCCCGCCGGGAGGCTGAGCCAGCTTCCCGCTCCCGCTCCCGCGCAGCTGCCCTTCCCGGGCGCGCGGGAGCGACCGACACCCCGGTGT  
CCTCGGCGGGGAGCCCCCGGGGCTCAGCGTCTCTCGTCTCCACCTCTCGGGGGCTCGGCCCTCGGGGGGGGCTGTGGGGCGGCTCTATGACT

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TGACAACTCAAGGAAACAGCAGTACAGTACTATTAGAAGTTAAGTATGTTGTGTTATTTTCACATTTTCATTTAATTGTGGATAAAATGTTAGACATCTGTTGAAATC  
TAAGCTCATATGTTGGAAACGACAACTATATTAATGAATATTTTCAGAAATGGATCTTTGAATAGCAGATCAGGATTTAAATAATAAATTAATCTATGAATC  
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TACACTTTCAAAGTGAAGCGGAGGTGTGTCAGGAGATCCCGGAGACCTCAAGCTGGATGCCCTGTGAGATGAATGAGGCCAAGGTGAAGGAGACGCT  
GCGGCGCTGTGGGCCAGAGGGGATGAGTGTGGCCGTCTGCAGTATGCCCTCACTGCTGCGGAAGGTGACAGGCGCTGGAGGGGAGCACAAAGGAGGAC  
TCCAGTTGAGTTCAATTGGATGCGCGGGGGAAAGTGGCTCAGGGCCTTCCACGGAACCCCTCAGCAGCCAGCTGCCCTGGCCCCCAGGAGCTCCCA  
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AGACAACCTGTAATCCCTGCAACGCGCCAGGCGCGGTGACCCCGGTGCGCTGCAACGCGCGCTCAACCGCGCCACCAACCCAGCTTCAGTGACGGCACACCAA  
GCTGAACCCACCAACGACCGCCCCCCCCACCCAGCCGCAAGGTCTTCCAGTGTGCTGCCCCACACTCACCCGAGCAAGTCCCATGAGTCTCAGCT  
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CACCAAGCAAAAAACAACCTGCCTGCCAGCGCTGCAACCAAGGACACACGTCTAGATGACAGTGTGGCCATAACCCCACTCGGGAGATGGAGAC  
CACCTGCTATTTCTTAAATGACACCCCAACCAACCTGTCTATGACAGACAGCAAAATGTTTACACGTATATTTCTCTGAGTGAACCTGATGTTTACA  
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CCATGCTGGCCAGAAAGGAAACAAACATGGTAATGACGCTGTCTTGGGGTAGGGCGGGGAGCCCAAGAGGTCTGATCTGGCCTCTGCTTTTGGCCCA  
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[illegible]

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Figure 2

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DLLSEENQEKMIYFLLLDRKERYPSQDEDLPPRNEIDPPKRKVDSPMLNRHGKRRRPERKSMVLSVTDGGSPVPARRAIEMA QHGQSRSRISGASSGLSTPLSSP  
RVTPHPSRPGSPLPKGTPTPKESPA GTNPTPPSPSVGGVPWRARLNSIKNSFLGSPRFHRRKLQVPTPEEMSNLTPESSPELAKKSWFGNFISLEKEEQIFVVI  
KDKPLSSIKADIVHAFLSPSLSHSVISQTSFRAEYKATGGPAVFQKPVKFQVDITYTEGGEAQKENGIVSVTFTLLSGPSRRFRKRVVETIQALLSTHDPPAAQHLSEP  
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FCGSPPYAAPELFQGGKYDGPVEDVWSLGVILYTLVSGSLPFDGHNKELRERVLRGKYRVPFYMSTDCESILRFLVLNPAKRCTLEQIMKDKWINIGYEGEELKP  
YTEPEEDFGDTKRIEVMVMGYTREEIKESLTSQKYNEVATYLLLRKTEEGDGRGAPGLALARVRAPSDTTNGTSSSKGTSHSKGQRSSSTYHRQRRHSDFCG  
PSPAPLHPKRSPTSTGEAELKEERLPGRKASCSTAGSGRGLPPSPMVSSAHNPNAEIPERRKDDSTSTPNLPPSMMTRNTYVCTERPGAERPSSLNPGKENSSGT  
PRVPPASPSHSLAPPSGERSRLARGSTIRSTFHGGQVRDRRAGGGGGGVQNGPPASPTLAHEAAPLPA GRPRPTNLFTKLTSKLTRRVADEPERIGGPEVTSCHL

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PWDQETAPRLLRFPWSVKLTSSRPPEALMAALRQATAAAARCRRCRQPQPFLLACLHGGAGGPEPLSHFEVEVCQLPRPGLRGVLFRRVAGTALAFRTLVTTRISNDL  
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TVVEGPLYTVCGTPTVVAPEIIAFTGYGLKVDIWAAGVITYILLCGFPFRSENNLQEDLFDQILAGKLEFPAPYWDNITDSAKELISQMLQVNVVEARCTAGQILSHP  
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SPPEWIRYHRYHGRSATVWSLGVLLYDMVCGDIPFEQDEILRGRLLFRRRVSPCCQLIRWCLSLRPSERPSLDQIAAHPWMLGADGGAPESCDLRLCTLDPDDV  
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SVPTKTYSNVVTWYRPPDVLLGSTYESTPIDMWGVGCIHYEMATGRPLPGSTVKEELHLIFRLLGTPTETWPGVTA FSEFTYSFPCYLPQPLINHAPRLDTDG  
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FGLVPFDEITGSQQQKVKQKSLQKLSRQRRTKQDMKSNKGRHHGTPSTTKTLKPTYRTPERARRHKVGRRRDSQSSNEFLTSDSKENISVALTDGKDRGNVL  
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DPETSVEIRIWWGGIKQLLHILQGDNRNVSDHSSIGSLSSANAAGRIQQHLHSEDLSPREIQENTFSLQAACCAATLVLNDTNAHQVVQENGVVYTIKLLIPNKQKN  
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SADLPPEGFQASYGKDEDRACDEILSDDNFNLENAEKDITYSEVDDDELISDNSSSSSSPLKESTFNILKRSFSASGGERQSQTRDFTGGTSRPRPGMQMGTFWQA  
SAGIAVSQRKVRQISDPIQILQLHKIYITQLPPALHNLKRRVIERFKKSLFSQQSNPCNLKSEIKLSQGSPEIEPNFTADYHLLHRSSGGNSLSPNDPTGLPTSIE  
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HKPSYHPQENTGVEDYQGETRHGPSQWPAEYLQRKFEAQYKLVKQGLRPSAEPNVNQRQELRNGEERFQELPFRKNEMKEQEYWKQLEIRQQY  
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TFEDGMKFKEYECVKEHGDYTDKAFKHLHCEAGFSTQTVAAGVGNRRQWDGGAPQTLQMMMAVADITSTCPTGPDNGQVIVIEGIPGNRKQWRHEAPGTLMSVL  
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WVQVQICLALKHVHDKILHRDIKSNIFLTKDGTVQLGDFGIARVLNSTVELARTCIGTPYYLSPEICENKPYNNKSDIWA LGCVLYELCTLKHAFAEGSMKNLVLK  
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DKKLHEKKPLQKHQAHTPEKRVNTGEERRKISEEAAARKRLLEFIEKEKKQKDQIISLMKAEQMKRQEKERLERINRAREQGWNRNLSAGSGSEVKAPFLGSGG  
TIAPSSFSRSGQYEHYHAIFDQMQQQAEDNEAKWKREIYGRGLPERGILPGVRPGFPYGAAGHHHFPDADDIRKTLKRLKAVSKQANANRQKQLAVERAKQVE  
EFLQRKREAMQNKARAEGHMGILQNLAAAMYGGPRSSRGGKPRNKEEVYLARLRQJRLQNFNERQQIAKLGRGEKKEANHSEGEQEGSEADMRRKKIESLKAH  
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SADRITIQENEVSEDGVSTVDQLSDIHIEPGTNDQSQSKCDVDKSVQPEPFFHKVVHSEHLNLVPQVQSVQCSPEESAFRSHSHLPPKNKNKNSLLIGLSTGLFDAN  
NPKMLRITCSLPDL SKLFRITLMDVPTVGDVRQDNLEIDEIEDENIKEGPSDSEDIVFEETDIDLQELQASMEQLLREQPGEEYSEEEESVLKNSDV EPTANGT DVADE

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MEGDGVPWGSEPVSGPGGGGMIRELCRGFGYRRYLGRRLRQNLRETQKFFRDIKCSHNHTCSSLTGGGGAERGPA GDVAETGLQAQGLSCISFPKKEEYLYQ  
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MHHALLQEVDVVAPCQGLRPTVDVLGDLVNDLFPVITYALHKDELSEDEQELQEIRKYFSFPVFFFKVPKLGSEIDSSTRRMESESPLYRQLIDLGYLSSSHWN  
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GSSVTRMLWEQIKQIQRITWVSPATILEWKRKV AQEAIESLSASKLAKSICSQFTRLNSSHEAFAASLRQLEAGHSGRLEKTEDLWLRVRKDHAPRLARLSLESR  
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SLPTNGAA WHHIRKGNFPDVPQELSEFSLLKNMIQDAEORPSAAALARNTVLRPSLGKTEELQQQLNLEKFKTATLERELREAQQAQSPQGYTHHGDTGVSGT  
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YLDNFIKIGEGSTGIVCIATVRSSGKLVA VKKMDLRKQQRRELLFNEVVMIRDYRHENNVEMYNLYV GDELWVVMFELEGALTDIVTHTRMNEEQIAA VCLAV

FIGURE 2, Page 12 of 18



LLQLEGSSPEPSTCPSGLVPEPPEQPAKVRPGSPSCSQFFLLTPVPLRSEGNSSSEFQPPGLLSGPAQKRMGGPGTPRAPRLALPGLPAALEGRPEEEEESEDS  
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